

REEL # 432

PORCORELAYA, Y.E.P.

POKROVSKIY, Ivan Fedorovich; POGORELAYA, Ye.P., red.

[Publicizing literature on applied economics] Propaganda  
literatury po voprosam konkretnoi ekonomiki. Leningrad,  
1958. 153 p. (MIRA 12:7)  
(Libraries and readers)  
(Economics--Study and teaching)

LEVIN, Mikhail Izrailevich; POGORELAYA, Ye.P., red.; KRYUCHKOVSKIY, S.A., red.

[For the young worker on the economics of industrial production] Mo-  
lodomu rabochemu ob ekonomike promyshlennogo proizvodstva. Leningrad,  
1960. 13 l. (MIRA 14:7)

1. Leningrad. Publichnaya biblioteka.  
(Industrial management)

155540

26438  
S/183/61/000/004/001/002  
B101/B206

AUTHORS: Berestnev, V. A., Nagdaseva, I. P., Pogorelko, A. N.,  
Kargin, V. A.

TITLE: Increase of thermostability of caprone fiber

PERIODICAL: Khimicheskiye volokna, no. 4, 1961, 26 - 28

TEXT: The authors discuss the increase of thermostability of caprone fiber by oxidation inhibitors. Since an addition of such substances to the initial polymer might impair its mechanical properties, the authors think it more convenient to apply such inhibitors on the finished fiber as a protective coat. In this case, the process may be combined with others such as impregnation or dyeing. The authors report on the treatment of caprone fiber with aqueous solutions of metal salts. Caprone cord of the type 14K (14K) was used for tests. It was immersed in the salt solution for 5 - 8 sec, and then dried for 5 min at 115 - 120°C. Cord fabric was immersed for the same time in the salt solution, and dried for 5 min at 132 - 136°C. In a combination with impregnation by latex emulsion, the metal salts were directly dissolved in the impregnation solution if

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Increase of thermostability...

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X

the latter was acidic. If it was alkaline, the cord was first treated with the salt solution, then with the impregnation solution. After this treatment the cord fibers were heated for 100 hr at 150°C with 2 kg load, and tensile strength as well as breaking elongation were measured. Table 1 gives the results. Since a mixture of  $\text{CdCl}_2$  and  $\text{CuCl}_2$  showed the best effect, experiments followed with: (1) 0.03%  $\text{CuCl}_2$  + 0.065%  $\text{CdCl}_2$ ; (2) ditto plus impregnation solution of the type РМ-40 (RSh-40); (3) 0.1%  $\text{CuCl}_2$  + 0.1%  $\text{CdCl}_2$ ; (4) ditto plus RSh-40; (5) 0.03%  $\text{CuCl}_2$  +  $\text{CdCl}_2$  plus impregnation solution on resin-89 basis. Results: (a) The unheated fiber had a tensile strength of about 15.20 kg and an elongation of 27.3 - 32.9%; (b) the heated, untreated fiber had a tensile strength of 3.1 - 3.28 kg and an elongation of about 6.4%; (c) treatment with the solutions mentioned produced a tensile strength increase of the heated fiber to 11.46 - 14.49 kg, and an elongation increase to 15.8 - 18.34%. The authors point out that this surface treatment is only effective for thin fabrics exposed to oxygen, but not for heavy products such as tires. Treatment of the fibers with  $\text{H}_2\text{S}$  and microscopic investigation (conducted by Ye. S. Alekseyeva)

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Increase of thermostability...

Showed that the fibers were covered only on the surface by metal sulfides. Therefore, this surface treatment of the fibers with metal chlorides protects the surface against oxidation, and does not change the other mechanical properties of the fiber. There are 2 figures, 2 tables, and 6 Soviet-bloc references.

ASSOCIATION: NIIShP (V. A. Berestnev, I. P. Nagdaseva, A. N. Pogorelko);  
NIFKhI im. L. Ya. Karpova (NIFKhI imeni L. Ya. Karpov)  
(V. A. Kargin)

Card 3/4.

POGORELKO, A. S.

USSR/Medicine - Infectious Diseases

Oct 50

"Listerellosis in Swine," N. I. Zagurskiy, A. S.  
Pogorelko, Veterinarians Nezhin Inter-Rayon Vet  
Bacteriol Inst, Chernigovsk Oblast

"Veterinariya" No 10, pp 26-28

Observed serious outbreak of listerellosis toward  
end of Jan 49. Describes clinical manifestations,  
pathol and anat changes, diagnosis and gen etiol  
of the disease in detail.

186T93

MAKSUDOV, Norkhodzha Khodzhayevich, kand. biol. nauk; POGORELKо,  
I.P., doktor med. nauk, prof., red.[deceased];  
SHAIAKHMEDOVA, R.S., red.

[Production of essential oils (terpenes) and their use in  
urolithiasis] Poluchenie esfirnykh masel (terpenov) i ikh  
primenenie pri mochekamernoi bolezni. Tashkent, Izd-vo  
"Meditina" UзSSR, 1964. 135 p. (MIRA 18:3)

POGORELKO, I.P., doktor med.nauk; ZMOYRO, I.D.

are complication following surgery on a vesicovaginal fistula.  
Akush. i gin. 40 no.3:127 My...Je '64.

(MIRA 18:6)

I. Urologicheskoye otdeleniye Tashkentskoy gorodskoy bol'ницы  
imeni 25-letiya Uzbekistana (glavnyy vrach M.Ishankhodzhayeva).

MAKSUDOV, N.Kh.; POGORELKO, I.P.; YULDASHEV, P.Kh.

Chemical investigation of Artemisia scoparia. Uzb.khim.zhur.  
6 no.5:84-86 '62. (MIRA 15:12)

1. Institut khimii rastitel'nykh veshchestv AN UzSSR.  
(Uzbekistan—Artemisia)

POGORELKO, I. P.

24430

POGORELKO, I. P.. O diagnosticheskoy tseennosti vezikulografii. Trudy Glav. voyen. Gospitalya Vooruzh. Sil SSSR im. Akad. Burdenko. VEP. 6, N., 1949, s. 195-203. - Bibliogr: 30 nazv.

SO; Letopis, No. 32, 1949.

FOGORELKO, I. P.

Diseases of the Genito-Urinary System

Dissertation: "Vesiculography in Tuberculosis of the Gentilia and Tumors of the Prostrate Gland." Cand Med Sci, Central Inst for the Advanced Training of Physicians, 16 Mar 54. (Vechernaya Moskva, Moscow, 4 Mar 54).

SO: SUM 213, 20 Sep 54

SHCHERBA, F.I.; POGORELKOG, I.P.

Use of an electrophoretic method with streptomycin and anesthetics  
in treating tuberculous and trophic lesions of the bladder. Sov.  
med. 18 no.9:32-33 S '54. (MLRA 7:11)

1. Is fizioterapevtskogo otdeleniya (zav. - prof. V.A.Ivanov)  
i urologicheskoy kliniky (dir. - prof. A.P.Frumkin) TSentral'nogo  
instituta usovershenstvovaniya vrachey na baze Klinicheskoy ordena  
Lenina bol'niitsy imeni S.P.Botkina (glavnnyy vrach - prof. A.N.  
Shabanov)

(BLADDER, diseases  
trophic lesions, electrophoresis of streptomycin ther.  
& anesthetics)

(STREPTOMYCIN, therapeutic use  
tuber., venal & trophic lesions of bladder, electro-  
phoresis)

(ANESTHETICS, therapeutic use  
same)

(TUBERCULOSIS, RENAL, therapy  
anesthetics & streptomycin electrophoresis)

EXCERPTA : EDICA Sec 9 Vol 13/7 Survey July 59

ed

")

4075. INTERMUSCULAR APPROACH TO THE HIGHER PARTS OF THE RENAL TRACT (Russian text) - Pogorelko I.P. - UROL. 1957, 5 (11-16)  
102 operations on kidneys and ureters, mainly for nephrolithiasis, were performed without division of muscle or nerve fibres with good results. Spinal anaesthesia, which produces relaxation of abdominal muscles, is recommended. Good results were obtained using curare-like muscle relaxants. The main advantage of this form of approach is absence of any postoperative atrophy of muscles and resulting incisional herniae. An intermuscular incision between the triangles of Grynfelt and Petit allows good exposure of the kidney, and posterior and inferior pyelotomy can be easily carried out. This form of approach is not recommended in renal tb or neoplastic diseases.. (S)

POGORELKOV, I.P., doktor med. nauk

Repair of the urinary bladder and urethra in exstrophy. Urologiia 28 no.5:57-58 S-0'63 (MIRA 17:4)

1. Iz urologicheskoy kliniki ( zav. -- doktor med. nauk I.P. Pogorelko) Tashkentskogo meditsinskogo instituta.

POGORELKOV, I.P.

POGORELKO, I.P., dotsent

Uretero-ureteral anastomosis in ectopia of double ureters. Urologija  
22 no.4:56-57 Jl-Ag '57. (MIRA 10:10)

1. Iz urologicheskoy kliniki Tashkentskogo meditsinskogo instituta  
imeni V.M.Molotova (dir. - dotsent A.G.Gulamov)  
(URETERES, abnormalities,  
double ectopic, uretero-ureteral anastomosis (Rus))

POGORELKO, I.P., dots.

Posteromedial intermuscular approach to the kidney in a prone position.  
Urologia 24 no.2:32-36 Mr-Ap '59. (MIRA 12:12)

1. Iz urologicheskoy kliniki (zav. - dots. I.P. Pogorelko) Tashkent-  
skogo meditsinskogo instituta.

(KIDNEYS, surgery,

posteromedial intermusc. approach in prone position  
(Rus))

POGORELKOV, I.P.,dots.

~~Subcortical pyelotomy. Khirurgia 35 no.4:119-121 Ap '59.~~  
~~(MIREA 12:8)~~

1. Iz urologicheskoy kliniki (zav. - dots. I.P.Pogorelko)  
Tashkentskogo meditsinskogo instituta.  
(KIDNEY PELVIS, surg.  
pyelotomy, subcortical, in calculosis (Rus))

MAKSUDOV, N. Kh.; POGORELKO, I.P.

Clinical experiments with new terpene-containing drugs. Uzb.  
biol. zhur. 7 no.2:38-44'63. (MIRA 16:8)

1. Institut Khimii AN UzSSR.  
(TERPENES—CALCULI, URINARY)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341610001-4

POGORELKо, I.P.

"Pyelic refluxes and their clinic significance" by A.IA. Pitel'.  
Reviewed by I.P. Pogorelko. Med. zhur. Uzb. no.8:85-88 Ag '60.  
(MIRA 13:9)

(KIDNEYS—DISEASES)  
(PITEL, A.IA.)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341610001-4"

POGORELKо, I.P., doktor med. nauk; MAKСUDOV, N.S., aspirant

Etheral oils (artemizol) in the treatment of urolithiasis;  
clinical experiments. Med. zhur. Uzb. no.6:52-55 Je'63

(MIRA 17:3)

1. Iz urologicheskoy kliniki Tashkentskogo meditsinskogo in-  
stituta i Instituta khimii AN UzSSR.

POGORELKO, Ivan Panteleymonovich; MEDVEDEVA, T.S., red.; AGZAMOV, K.,  
tekhn. red.

[Urolithiasis; surgical intervention for stones in the kidneys  
and ureters] Mochekamennaia bolezn'; khirugicheskoe vmeshatel'-  
stvo pri kamniakh pochek i mochetochnikov. Tashkent, Medgiz  
UzSSR, 1960. 272 p. (MIRA 15:7)  
(CALCULI, URINARY)

POGORELKо, I.P., dotsent

Rupture of an aneurysm of the intramural section of the renal artery  
with subsequent suppuration. Med. zhur. Uzb. no. 1:63-64 Ja '60.  
(MIRA 13:8)

1. Iz urologicheskoy klinii Tashkentskogo gosudarstvennogo  
meditsinskogo instituta.  
(ANEURYSMS) (KIDNEYS—DISEASES)

POGORELKO, I.P., dotsent

Modern concept of the etiopathogenesis of nephrolithiasis. Med.  
zhur. Uzb. no.11:3-10 N '60. (MIRA 14:5)

1. Iz urologicheskoy kliniki Tashkentskogo gosudarstvennogo medit-  
sinskogo instituta.

(CALCULI, URINARY)

POGORELKO, I.P., dotsent

Surgery in bilateral nephrolithiasis. Sov. med. 24 no.4:66-70 Ap  
'60.  
(MIRA 13:8)

1. Zaveduyushchiy urologicheskoy klinikoy Tashkentskogo meditsinskogo  
instituta.

(CALCULI, URINARY)

POGORELKO, I.P.

Restoration of the urinary bladder, sphincter, and penis in exstrophy.  
Urologia 25 no. 5:65-68 S-O '60. (MIRA 14:1)  
(BLADDER DISEASES)

POGORELKо, I. P., Doc MED Sci,

*Treatment prevention*  
"THERAPY AND PROPHYLAXIS"

OF NEPHROLITHIASIS." ALMA-ATA, 1961. (KAZAKH STATE MED  
INST). (KL-DV, 11-61, 226).

-231-

MIRSAGATOV, M.U.; POGORELKO, I.P.; KASYMKHODZHAYEV, I.S.

Innervation of the seminal vesicles in man. Med. zhur. Uzb. no.6:  
59-62 Je '61. (MIA 15:1)

1. Iz gonorognogo otdeleniya Uzbekistskogo kozhno-venerologicheskogo  
instituta i urologicheskoy kliniki Tashkentskogo gosudarstvennogo  
meditsinskogo instituta.  
(SEMINAL VESICLES—INNERVATION)

POGORELKO, I.P., dotsent

N.I.Pirogov, the founder of Soviet surgery. Med. zhurn. Uzb. no.10:  
52-57 '61. (MIRA 14:10)  
(PIROGOV, NIKOLAI IVANOVICH, 1810-1881)

POGORELK0, I.P., dotsent; ZMOYR0, I.D.; KHODIYEV, E.M.

Case of vascular plastic surgery of the urethral canal. Med. zhur.  
Uzb. no.12:80 D '61. (MIRA 15:2)

1. Iz urologicheskogo otdeleniya Tashkentskoy gorodskoy bol'nitsy  
No.6 (glavnnyy vrach - M.Kh. Ishankhodzhayeva).  
(URETHRA SURGERY)

POGORELKOV, I.P., dotsent

Surgical approaches to the ureter in ureterolithotomy.  
Khirurgija 37 no.3:100-103 Mr '61. (MIRA 14:3)

1. Iz urologicheskoy kliniki (zav. - dotsent I.P. Pogorelko)  
Tashkentskogo meditsinskogo instituta.  
(URETER—SURGERY) (CALCULI, URINARY)

POGORELKOV, I.P., dotsent

Posterior oblique transverse approach to the kidney with the patient in a prone position. Urologiia no.4:28-32 '61.

1. Iz urologicheskoy kliniki (zav. - dotsent I.P. Pogorelko)  
Tashkentskogo meditsinskogo instituta.  
(KIDNEYS--SURGERY)

POGORELKO, I.P., doktor med. nauk

Simultaneous removal of calculi in bilateral nephro-neterolithiasis,  
Khirurgija 39 no.11:116-119 N '63. (MIRA 17:11)

1. Iz urologicheskoy kliniki (zav. - doktor med. nauk I.P. Pogorelko)  
Tashkentskogo meditsinskogo instituta.

FYTEL', Anton Yakovlevich, prof.; POGORELKOV, Ivan Panteleymonovich,  
prof.;

[Fundamentals of practical urology] Osnovy prakticheskoi  
urologii. Tashkent, Medgiz UzSSR, 1964. 328 p.  
(MIRA 17:12)

GIBSHMAN, Ye.Ye.,prof.; POGORELKO, K.A.,dotsent

Rubber shock absorbers for bridges. Avt.dor. 23 no.11,23-24  
N'60. (MIRA 13:11)  
(Bridges, Concrete)

POGORELKOV, L.V.; KHARLAMOVA, K.S.; TMYANSKAYA, Ye.A.; LOKSHINA, M.D.;  
VIKENT'IEVA, O.V.; LAVOCHKIN, M.P., otv.red.; RACHEVSKAYA, M.I.,  
red.,izd-va; GUROVA, O., tekhn.red.

[A concise handbook containing addresses of institutions,  
enterprises, and organizations concerned with cultural and social  
services for the population of the city of Moscow] Kratkii spra-  
vochik adresov uchrezhdenii, predpriatii i organizatsii po  
kul'turno-bytovomu obsluzhivaniyu naseleniya g. Moskvy. Po sosto-  
ianiiu na 25 dekabria 1953 g. Moskva, Izd-vo M-va kommun.khoz.  
RSFSR, 1954. 255 p. (MIRA 13:10)

1. Moskovskaya gorodskaya spravochno-informatsionnaya kontora  
"Mosgorspravka," Moscow.  
(Moscow--Directories)

NAZAROVA, O.M.; LOKSHINA, M.D.; POGORELKO, L.V.; TMYANSKAYA, Ye.A.;  
TIKHOMIROVA, T.S.; MODILEVSKAYA, P.A.; KHARLAMOVA, K.S., LAVOCHKIN,  
M.P., otvetstvennyy redaktor; LIL'YE, A., tekhnicheskiy redaktor

[Moscow; a concise commercial and cultural directory. As of July 15,  
1956] Moskva; kratkaya adresno-spravochnaya kniga. Po sostoyaniyu  
na 15 iulija 1956. [Moskva] 1956. 495 p. (MLRA 10:1)

1. Moskovskaya gorodskaya spravochno-informatsionnaya kontora  
"Mosgorspravka," Moscow.  
(Moscow--Directories)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341610001-4

KADYKOV, B.I.; KACHANOVA, Ye.Ye.; POGORELKOV, M.A.

Vitamin C secretion with milk depending on the capacity of the organism to synthetize ascorbic acid. Dokl.AN SSSR 104 no.5:792-794. O '55.  
(MIRA 9:2)

1.Leningradskiy nauchno-issledovatel'skiy sanitarno-gigiyenicheskiy institut. Predstavleno akademikom L.A.Orbeli.  
(MILK, HUMAN) (ASCORBIC ACID)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341610001-4"

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341610001-4

POGORELO, N. A., INGANOV, YE. YE.

"General rules of vitamin C secretion in regard to milk and their  
hygienic significance."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists  
and Infectologists, 1959.

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341610001-4"

DIMOV, L.D.; PECHATNOV, A.V.; VAYNSHTEN, Sh.I.; POGORELK0, M.P.

Drying and calcinating furnace for electrodes. Prom.energ.  
15 no.5:19-21 My '60. (MIRA 13:?)  
(Electric furnaces) (Electrodes)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341610001-4

POGORELKо, N., inzh.

With Omsk builders. Sel'stroi. no.8:24b-26 Ag '62. (MIRA 15:11)  
(Omsk Province--Construction industry)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341610001-4"

POGORELKOV, N.

Construction of cultural and public buildings on collective farms in  
Belgorod Province. Sel'stvo. no. 8:2-4 Ag '56. (MIRA 9:10)

1. Glavnyy inzhener Glavkolkhozstroya Ministerstva gospromstvo i sel'-  
skogo stroitel'stva RSFSR.  
(Belgorod Province--Construction industry)

POGORILKO, N.

Construction organizations and enterprises serving more than one collective farm. Sel'. stroi. 11 [i.e. 12] no. 2:3-5 F '57. (MIR 10:4)

1. Glavnyy inzhener Glavkolkhozstroya Ministerstva gorodskogo i sel'skogo stroitel'stva RSFSR.  
(Molotov Province--Construction industry)

POGORELKо, N.I., inzh.; KOVLER, B.A., inzh.

Introduce reed into construction elements for farm buildings and  
structures. Stroi. mat. 7 no.7:10-12 J1 '61. (MIRA 14:7)  
(Reed products) (Farm buildings)

PHASE I BOOK EXPLOITATION SOV/3811

Pogorelko, P.A.

Novy vid dal'ney svyazi na metrovikh volnakh (New Kind of Long-Distance Communication on Meter Waves) Moscow, Izd-vo "Sovetskoye radio," 1959. 84 p. No. of copies printed not given.

Ed.: T.V. Kukoleva; Tech. Ed.: A.A. Sveshnikov.

PURPOSE: This booklet is intended for the general reader.

COVERAGE: This is a survey of certain articles which appeared in the December, 1957, issue of the Proceedings of the IRE. These articles were devoted to problems of burst-type intermittent radio communication systems, such as the Canadian "Janet" system. Articles by P.A. Forsyth, L. Lorne Campbell, G.W.L. Davis, G.F. Montgomery, and W.R. Vincent have been included in the survey. This survey is based entirely on non-Soviet experience. There are no references.

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New Kind (Cont.)

Conclusion

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Appendix: Carrying Capacity of Intermittent Communication Lines

(TK6553.P58)

JP/jb  
6-22-60

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CIA-RDP86-00513R001341610001-4

FRAKMAN, E.A.; POGORELKO, P.I.; IGRON, S.M. (Tashkent).

Activities of the Tashkent Urological Society in 1957. Urologiia 23  
no.6:70-71 N.D '58. (MIRA 11:12)  
(TASHKENT-UROLOGY--SOCIETIES)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341610001-4"

POGORELKOV, A.I.

Substitutes for metal. Det. khor. igr. no.1:37-40 '55.

(MLRA 10:2)

1. Zameduyushchiy laboratoriye Nauchno-issledovatel'skogo  
instituta igrushki.  
(Toys)

POGORELKO, P.I., dotsent

Case of giant hematonephrosis. Med. zhur. Uzb. no.1:67-68 Ja '61.  
(MIRA 14:6)

1. Iz urologicheskoy kliniki Tashkentskogo gosudarstvennogo medit-  
sinskogo instituta. (KIDNEYS--DISEASES)

POGORELOV, A.

Sbornik Zadach po Vysshei Matematike (Collection of Problems on Higher Mathematics - Integral Calculus and Differential Equations) (Paper edition)

182 p. 75¢

SO: Four Continent Book List, April 1954

POGORIEV, A.

New method of determining barrenness in cows. Nauka i pered.  
(MIRA 13:4)  
op. v sel'khoz. 9 no.12:53-64 D '59.

1. Glavnyy zootehnik Kuybyshevskoy raysel'khozinspeksii,  
Pavlodarskoy oblasti.  
(sterility in animals) (Cows)

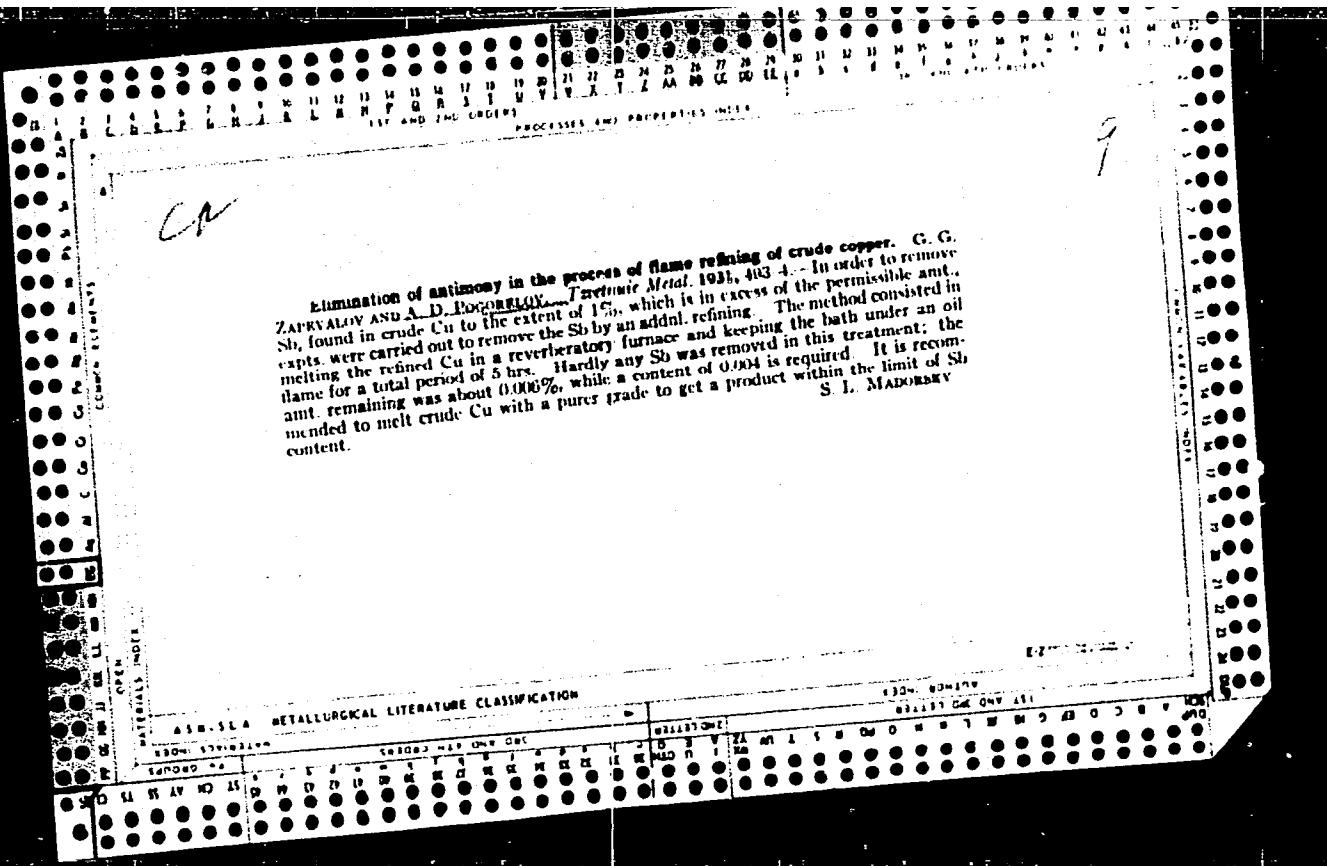
ISAY, V.M.; POGORELOV, A.A.

Some special features in conducting underwater construction  
operations. Trudy Otd. energ. Dug. fil. AN SSSR. 1 no.1:50-54  
'62. (MTRA 17:7)

POGORELOV, A.D.

Harvesting time for corn preceding winter wheat. Zemledelie 25  
no.8:73-74 Ag '63. (MIRA 16:10)

l. Rozovskaya optytnaya stantsiya Vsesoyuznogo nauchno-issledo-  
vatel'skogo instituta kukuruzy.  
(Ukraine—Corn (Maize)—Harvesting)



PISARENKO, V.N.; POGORELOV, A.G.; NOVIKOVA, L.A.; IVANOVA, N.G.;  
KONONOV, N.F.

Use of multiple regression equations for the quantitative  
analysis of heterogeneous catalysis. Zav.lab. 30 no.3:336-337  
'64. (MIRA 17:4)

1. Institut organicheskoy khimii AN SSSR.

POGORELOV, A.I.

[Collection of problems in higher mathematics; integral calculus and differential equations; text and method book for correspondence students of pedagogical institutes] Sbornik zadach po vyshhei matematike; integral'noe ischislenie i differentials'nye uravneniya; uchebno-metodicheskoe posobie dlia studentov-zachchnikov pedagogicheskikh institutov. Moskva, Gos. uchebno-pedagog. izd-vo, 1951. 183 p.  
(Calculus, Integral--Problems, exercises, etc.) (Differential equations--  
Problems, exercises, etc.)

(MLRA 6:5)

POGORELOV, A.I.

A.I. Pogorelov and B.I. Trupp, Kombayner M.A. Braga [Combine Operator M.A. Braga].  
Sel'khozgiz, 2.5 sheets.

Tells of the work experience of M.A. Braga, combine operator of the Bekhtersk  
MTS of Kherson Gublast. In 1949 he was awarded the title of Hero of Socialist Labor,  
and was decorated in 1950 and 1951 with the Order of Lenin. In the 1952 harvesting  
season he mowed 806.5 hectares and threshed 13,816 centners of grain.

SO: U-6472, 15 Nov 1954

POGORELKOV, A. I.

5625

Zvukovyye pribory dlya igrushek. M., Koiz, 1954. 76s + ill. 22mm. 1.000 ékz  
2R 50 K. (55-1575) P 688.72

SD: Knizhnaya Letopis', Vol. 1, 1955

POGORELOV, A. I.

POGORELOV, A. I. -- "The Square-Nest Method of Sowing Cotton." Min  
Higher Education Ukrainian SSR. Odessa Agricultural Inst. Odessa,  
1955. (Dissertation for the Degree of Candidate in Agricultural  
Sciences)

SO: Knizhnaya Letopis', No 1, 1956

SOV/124-57-3-3469

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 3, p 122 (USSR)

AUTHOR: Pogorelov, A. I.

TITLE: Determination of Torsional-oscillation Frequencies of Crankshafts  
(Opredeleniye chastot krutil'nykh kolebaniy kolenchatogo vala)

PERIODICAL: Nauch. tr. Khar'kovsk. in-ta inzh. kommun. str-va, 1956, Nr 6,  
pp 132-146

ABSTRACT: The torsional oscillations of a multimass system are determined.  
Methods are indicated for obtaining greater accuracy of the primary-  
frequency values and reducing the number of calculations required to  
obtain the secondary-frequency values.

Ya. G. Panovko

Card 1/1

POGORELOV A. I.

SOV/124-58-5-5766

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 121 (USSR)

AUTHOR: Pogorelov [Pohoryelov, A. I.]

TITLE: Determination of the Influence Coefficients for the Calculation of the Oscillation of Multispan Continuous Beams (Opredeleniye koeffitsiyentov vliyaniya mnogoproletnykh nerazrezykh balok pri raschete ikh na kolebaniya) [ Vyznachennya koefitsiyentiv vplyvu bahatoprohinykh nerozriznykh balok pri rozrakhunku yikh na kolyvannya] in Ukrainian

PERIODICAL: Nauk. pratsi. Kharkiv's'k. in-t inzh. komun. budivnytstva, 1956, Nr 7, pp 61-68

ABSTRACT: Bibliographic entry

1. Beams--Oscillation    2. Oscillations--Mathematical analysis

Card 1/1

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341610001-4

KREYMERMAN, M.G.; POGORELOV, A.I.

Feed-bin device for automatic single-spindle machines. Mashinostroitel'  
no.10:17-18 0 '59. (MIRA 13:2)  
(Machine tools--Attachments)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341610001-4"

POGORELOV, A. I., CAND TECH ScI, "VACUUM SELF-WATERER FOR  
SHEEP." (EXPERIMENTAL ~~STUDIES~~ AND METHODS OF ~~CONSTRUCTION~~  
~~TESTING~~). KIEV, 1960. (MINISTRY OF AGR UK SSR. UKRAINIAN ACAD  
OF AGR SCIENCES). (KL, 2-61, 211).

-172--

POGORELOV, A.I., inzhener-mekhanik

Theoretical principles of designing vacuum-type automatic stock  
waterers. Trudy "Ask.-Nov." 8:204-213 '60. (MIRA 14:4)  
(Cattle-Watering)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341610001-4

POGORELOW, A.K.

Reducing the amount of work required to move small mining shields.  
Gor. khoz. Mosk. 37 no. 7-46-47 JI '63. (MIRA 16:11)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341610001-4"

RYBALKIN, G.I., inzh.; SHARAPOV, V.A., inzh.; VELIKIY, I.G., inzh.;  
MALIOVANOV, D.I., doktor tekhn. nauk; PRUZHNIER, V.L., inzh.;  
KONDORSKIY, R.L., inzh.; TUMANOV, V.Ye., inzh.; POGORELOV,  
A.K., kand. tekhn. nauk

The BUKS-I equipment is an important step in the accomplishment  
of overall mechanization of shaft sinking. Shakht. stroi. 9 no.2;  
1-3 F '65.

(MIRA 18:4)

1. Kombinat Luganskshakhtostroy (for Rybalkin, Sharapov, Velikiy).
2. TSentral'nyy nauchno-issledovatel'skiy i proyektno-konstruktorskiy  
institut podzemnogo i shakhtnogo stroitel'stva (for Maliovanov,  
Fruzhnier, Kondorskiy, Tumanov, Pogorelov).

POGORELOV, A.K.

Investigation of a bunton made of semicylinders for use as  
a tunneling shield with a 2 $m$  diameter. Trudy TSNIIPod-  
zemshakhstroia no.2:186-195 '63.  
(MIRA 17:5)

Pogorelov A V

Pogorelov, A. A theorem regarding geodesics on closed convex surfaces. Rec. Mat. [Mat. Sbornik] N.S. 15(60), 181-183 (1946). (Russian. English summary) [MR 16684]

It is known that on a surface whose Gaussian curvature is everywhere not less than  $k_0$ , the geodesic distance between any two points is not greater than  $\pi/\sqrt{k_0}$ . In this paper a complementary theorem is proved: If  $S$  is a closed convex surface whose Gaussian curvature is nowhere greater than  $k_0$  and  $l$  is a geodesic on  $S$  of length less than  $\pi/\sqrt{k_0}$ , then  $l$  is the shortest curve on  $S$  joining its endpoints.

H. Wallin (Cambridge, Mass.).

Source: Mathematical Reviews.

Vol 8, No. 3

Smith

POGORELOV, A. V.

Pogorelov, A. V. The uniqueness of closed tubes. Uspehi Matemat. Nauk (U.S.) 3, no. 3(25), 170-182 (1948). (Russian)

In R<sup>2</sup> let  $C_1$  be a closed convex curve of class  $C''$  and nonvanishing curvature in the plane  $P_i$ ,  $i=1, 2$ , where  $P_1$  ( $P_2$ ) does not intersect  $C_1$  ( $C_2$ ). The author calls the boundary  $T$  of the convex closure of  $C_1 \cup C_2$  a tube. If  $T'$  is a convex surface intrinsically isometric to  $T$ , then  $T'$  is congruent to  $T$ ; that is,  $T'$  can be moved to coincide either with  $T$  or the image of  $T$  under a reflection of  $R^3$  in a plane.

H. Busmann (Los Angeles, Calif.).

Source: Mathematical Reviews.

Vol. 1

No. 2

*Source: Mathematical Reviews,*

Pogorelov, A. V. Rigidity of convex surfaces. Doklady Akademii Nauk SSSR (N.S.) 82, 27-29 (1948). (Russian)

Let convex surface denote a connected open subset  $S$  of the boundary of a convex body in  $E^3$ . The greatest lower bound of the lengths of all curves in  $S$  connecting two points  $a, b$  of  $S$  in the distance of  $a$  and  $b$ . Two convex surfaces  $S, S'$  are isometric if a distance-preserving mapping of  $S$  onto  $S'$  exists. The surface  $S$  is called rigid if every convex surface isometric to  $S$  is congruent to  $S$ .

If  $S$  has bounded curvature if reflection admitted. The surface  $S$  has bounded curvature if the ratio of the spherical excess of a geodesic triangle to its area is uniformly bounded.

Closed convex surfaces of bounded curvature are rigid which consists of a finite number of curves, each with total geodesic curvature  $2\pi$  (in the generalized sense of A. D. Aleksandrov), then  $S$  is rigid. A convex cap is a convex surface with a plane boundary and such that different points of the cap have different projections on the plane. Convex caps are rigid among caps. Let  $F$  be the total boundary of a nonbounded convex caps. Denote by  $K(R)$  the geodesic circle with radius  $R$  about a fixed point  $O$  of  $F$ , by  $l(R)$  the length of the shortest closed curve on  $F$  that contains  $K(R)$  and by  $I(R)$  the length of the shortest closed curve on  $F$  that contains  $K(R)$ . If  $F$  has bounded curvature and  $[2\pi - \omega(R)]/I(R) \rightarrow 0$  for  $R \rightarrow \infty$ , then it is rigid. Also, some results of S. Oleinik [Rec. Math. [Mat. Sbornik] N.S. 18(60), 429-440 (1946); these Rev. 8, 169] are generalized. There is only an indication of the proof of the first theorem.

Z. Buseman (Los Angeles, Calif.).

Pogorelsky, A. V. A general theorem on infinite convex polyhedra. Doklady Akad. Nauk SSSR (N.S.) 62, 167-189 (1948). (Russian)

A system  $v_1, \dots, v_k$  of vectors in  $E^n$  pointing into the half-space  $x_n > 0$  is called convex if no  $v_i$  is a linear combination, with nonnegative coefficients, of the remaining  $v_j$ . Denote by  $V$  the (conical) set of points representable in the form  $\sum \lambda_i v_i, \lambda_i \geq 0$ . Let  $\omega$  be a nonnegative function defined on all  $(n-1)$ -dimensional (solid) convex polyhedra  $Q$  and satisfying the three conditions: (1) if  $Q'$  can be obtained from  $Q$  by a translation of  $E^n$  then  $\omega(Q') = \omega(Q)$ ; (2) if  $Q'$  is properly contained in  $Q$ , then  $\omega(Q') < \omega(Q)$ ; (3) if  $s$  is the  $(n-1)$ -dimensional volume of  $Q$ , then continuous functions  $c_1(s)$  and  $c_2(s)$  with  $c_1(s) < \omega(Q) < c_2(s)$  exist such that  $c_1(s) \rightarrow 0$  for  $s \rightarrow 0$  and  $c_2(s) \rightarrow \infty$  for  $s \rightarrow \infty$ . The following generalization of a theorem of Minkowski is given. Let  $v_1, \dots, v_k$ ,  $k \geq n$ , be a convex system of vectors,  $l_1, \dots, l_m$  a system of rays in the corresponding set  $V$ , moreover,  $h_1, \dots, h_k$  any real numbers, and  $p_1, \dots, p_m$  any positive numbers. There exists a unique (unbounded) convex polyhedron  $\Pi$ , whose infinite faces have normals parallel to  $v_1, \dots, v_k$ , whose finite faces have normals parallel to  $l_1, \dots, l_m$  and such that  $H(v_i) = h_i$ ,  $i = 1, \dots, k$ , where  $H$  is the supporting function of  $\Pi$  and  $\omega$  has the value  $p_j$  on the face with normal  $l_j$ .

H. Busmann (Los Angeles, Calif.).

Source: Mathematical Reviews,

Vol 10 No. 6

POGORELOV, A. V., Dr. Physicomathematical Sci., Head., Geometry Div., Sci. Res.  
Inst. mathematics and Mechanics, Khar'kov State Univ., imeni A. M. Gor'kiy,  
-cl950-.

"Extension of a General Theory of Identity of A. D. Aleksandrov for the  
Case of Nonanalytical Surfaces."

Dok. AN, 62, No 3, 1948.

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341610001-4

POGORELOV, A. V.

26890: POGORELOV, A. V. - Apriornyye Otsenkidlye Preizvodnykh Rezulyarnogo Resheniya  
Uравнения V Chastnykh Preizvodnykh Ellipticheskogo Tipa. Uspeshni Matem. Nauk,  
1949, Vysh, 4, s. 179-82.

SO: Letopis' Zhurnal'nykh Statey, Vol. 36, 1949.

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341610001-4"

POGORELOV, A. V.

26891: POGORELOV, A. V. - K Dokazatel'stvu Vevel's Teoremy O Sushchestvovanii Zamknutey Analiticheskoy Vypukloy Poverkhnosti. Realizuyushchey Zadannyyu Na Sfere Analiticheskuyu Metriku s Pelozhitel'noy Kriviznou. Uspekhi Matem. Nauk. 1949, vyp. 4, s. 183-86.

SO: Letopis' Zhurnal'nykh Statey, Vol. 36, 1949.

PDR 200-4

**Popov, A. V.** Quasi-geodesic lines on a convex surface.  
Soviet Math. S. 25(62), 275-306 (1949) [Russian]

For the concept of a quasi-geodesic on a convex surface and other unfamiliar terms the reader is referred to the review of A. D. Aleksandrov's *Intrinsic Geometry of Convex Surfaces* [Moscow-Leningrad, 1948], these Rev. 19-39. Every geodesic is a quasi-geodesic, but not conversely. If  $X \subset K$  are convex bodies in  $E^3$  bounded by the convex surfaces  $F$  and  $F'$  and if the curve  $\gamma$  lies on both  $F$  and  $F'$  and is a quasi-geodesic (geodesic) on  $F$  then it is a quasi-geodesic (geodesic) on  $F'$ . If the quasi-geodesic arc  $\gamma_{AB}$  on  $F$  with end points  $A, B$  is deformed into  $\gamma_A$  so that  $A, B$  stay fixed and every interior point of  $\gamma_{AB}$  moves on a ray leaving  $K$  then  $\gamma_A$  is larger than  $\gamma_{AB}$ . If through every point of  $\gamma_{AB}$  a ray is drawn from a fixed interior point  $P$  of  $K$ , and the resulting cone is developed on a plane, then the image of  $\gamma_{AB}$  in the plane is convex.

The radius vector  $x(s)$  to a variable point on a quasi-geodesic  $\gamma$  on  $X$  with the arc length  $s$  on  $\gamma$  as parameter has right and left derivatives  $x'(s)$  and  $x''(s)$  everywhere and the two derivatives coincide except at a countable number of points. The derivatives  $x'(s)$  and  $x''(s)$  have bounded variation and their derivatives therefore exist almost everywhere. If  $p_i$  is a sequence of points on  $\gamma$  tending to the point  $p$  from the right but not lying on the right tangent  $\gamma^+$  of  $\gamma$  at  $p$  and has the angle  $\alpha_i$  between  $p_i p$  and the tangent  $\gamma^+$  then  $p$  forms with any half plane through  $p$  tend to a limit  $P$  point of  $X$  at least the angle  $\pi/2$ . This implies in the case that  $X$  has a tangent plane at  $p$  the result of the reviewer and Feller, that a geodesic through  $p$  has at  $p$  an osculating plane normal to the tangent plane.

For a given point  $p$  and every direction through  $p$  there is at least one quasi-geodesic with this direction. (The corresponding statement for geodesics is not true, even if  $F$  has a tangent plane at  $p$ .) There is a constant  $\rho(\gamma) > 0$  such that Let  $G$  be a domain on  $F$  which does not contain a conical point of curvature greater than or equal to  $\pi$ . Then the length of any quasi-geodesic one-gon in  $G$  is larger than a geometrically different closed quasi-geodesics. This is proved from the Lusternik-Schnirelmann result by approximation geodesics on surfaces with bounded curvature in Aleksandrov's sense; therefore these surfaces contain three closed geodesics.

H. Busemann (Los Angeles, Calif.)

Soc. S

Sources Mathematical Reviews

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3

POGORELOV, A. V.

\* Pogorelov, A. V. The rigidity of convex surfaces. Trudy Mat. Inst. Steklov. 29, 99 pp. (1949). (Russian)

A surface  $S$  in  $E^3$  is said to have bounded partial curvature if a number  $M$  exists such that the ratio of the measure of the spherical image of a domain on  $S$  to the measure of the domain itself stays below  $M$  (all concepts are to be taken in the general sense defined by A. D. Aleksandrov). If  $F_1$  is a closed convex surface of bounded partial curvature and  $F_2$  is any convex surface (intrinsically) isometric to  $F_1$ , then  $F_1$  is congruent to  $F_2$  (that is, can be carried into  $F_2$  by motions, including reflections). Since in this result no assumption is made regarding  $F_2$  beyond the convexity, it gives the first geometrically completely satisfactory answer to a type of problem first treated by Cohn-Vossen. For instance, it contains the result that a convex surface isometric to an ellipsoid is an ellipsoid. Another consequence is that a closed convex surface whose intrinsic metric is analytic and has positive Gauss-curvature is analytic as a surface in  $E^3$ . A convex cap is a convex surface  $S$  bounded by a plane curve  $C$  but such that the projection of  $S$  on the plane of  $C$  falls inside  $C$ . If  $F_1$  is a convex cap of bounded partial

curvature and  $F_2$  is a convex cap isometric to  $F_1$ , then  $F_2$  is congruent to  $F_1$ . Let  $F_1$  be a convex surface which is complete in the sense of the inner metric,  $z$  a fixed point of  $F_1$ ,  $k$  the circular disk on  $F_1$  about  $z$  with (geodesic) radius  $r$ ,  $l(r)$  the length of the shortest curve of  $F_1$  containing  $k_r$ , and  $\varphi(r)$  the total curvature of  $F_1$ . If  $[2\pi - \varphi(r)]l'(r) = 0$  for  $r \rightarrow \infty$ , then any convex surface  $F_2$  isometric to  $F_1$  is congruent to  $F_1$ . The theorem remains true if the condition of completeness is removed and  $F_1$  is permitted to have a finite number of holes, provided the total geodesic curvature (in the sense of Aleksandrov) of each boundary curve is nonpositive. There are also results for complete surfaces with total curvature less than  $2\pi$ . Since such surfaces are, in general, not congruent when they are isometric, additional hypotheses become necessary, which are too involved to be formulated here. They are in the spirit of those obtained by Olevjanishnikov [Rec. Math. [Mat. Sbornik] N.S. 18(60), 429-440 (1946); these Rev. 8, 169]. The article is very readable since pp. 11-19 are dedicated to a detailed explanation of the methods used in the proofs.

Source: Mathematical Reviews,

Vol.

H. Busemann (Los Angeles, Calif.).

12 No. 6d

(SMA) 499

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CIA-RDP86-00513R001341610001-4

POGORELOV, A. V.

"One General Theorem of Unity for Infinite Concave Surfaces."  
Dok. AN, 65, № 2, 1949

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CIA-RDP86-00513R001341610001-4"

*Pogorelov, A. V.*

Pogorelov, A. V. Intrinsic estimates for the derivatives of the second fundamental vector of a point on a closed regular convex surface. Doklady Akad. Nauk SSSR (AVS) 66, No. 308 (1949). (Russian)

Pogorelov, A. V. On the proof of Weyl's theorem on the existence of a closed analytic convex surface realizing an analytic metric with positive curvature given on the sphere. Uspeni. Matem. Nauk (AVS) 4, no. 4 (32), 183-186 (1949). (Russian)

Let  $p$  be a point of a closed analytic convex surface  $F$  in  $E^3$ , and  $\gamma$  a geodesic through  $p$ . Introduce geodesic coordinates  $u, v$  for which  $v=0$  and  $u=0$  represent  $\gamma$  and the geodesic  $\eta$  normal to  $\gamma$  at  $p$ , and  $u=v$  represent a geodesics  $d\omega + f(u, v)du$ . Put  $Z_\alpha(p, \gamma) = \partial^{i+j}f(u, v)/\partial u^\alpha \partial v^\beta$ , let  $m_i = \sup_{\gamma} |Z_\alpha(p, \gamma)|$  for  $i+j \leq k$ , if  $F$  is everywhere positive then  $m = \inf_{\gamma} |Z_\alpha(p, \gamma)| > 0$ .

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Let  $r(u, v)$  be the distance of the point on the surface with coordinates  $u, v$  from  $p$ . Then  $|r'(u, v)| = \sqrt{1 + |Z_\alpha(p, \gamma)|^2}$  and  $|r''(u, v)| \leq m_i$ . Then  $|r'(p, \gamma)|$  has a least upper bound which for  $i+j \geq 1$  depends only on  $m$  and  $m_i$ . The proof uses ideas of S. Bernstein.

Results similar to this were recognized by H. Weyl as

fundamental for the proof of the Weyl-Leray theorem that

the unit sphere can be realized by an analytic convex surface

in  $E^3$ . Following Weyl's idea the second paper uses the

above estimates to yield a simple approach to the theorem

H. Bernstein (Loc. Angeles, Calif.)

Source: Mathematical Reviews,

Pogorelov, A. V. On the regularity of convex surfaces  
 Doklady Akad. Nauk SSSR (N.S.) 66, 1051-1053 (1950) (Russian)  
 Pogorelov, A. V. On convex surfaces with a regular metric.  
 Doklady Akad. Nauk SSSR (N.S.) 67, 791-794 (1950) (Russian)

The surface  $F$  in  $E^3$  is called  $k$ -regular (analytic) if coordinates  $u, v$  can be introduced locally on  $F$  such that the components of the radius vector leading to a variable point on  $F$  are of class  $C^k$  (analytic) in  $u$  and  $v$ . The surface  $F$  is said to have a  $k$ -regular (analytic) metric if, locally, its coordinates  $u, v$  exist for which  $F_1, F_2, F_3$  are of class  $C^k$  (analytic). If a closed convex surface has a  $k$ -regular (analytic) metric,  $k \geq 12$ , then it is  $(k-5)$ -regular (analytic). A metric  $M$  defined in a domain  $G$  of the unit sphere  $U$  is called  $k$ -regular (analytic) if coordinates  $u, v$  are introduced in  $G$  such that the coefficients of both the line elements of  $U$  and  $M$  are of class  $C^k$  (analytic). If in  $G$  a  $k$ -regular metric with positive curvature is given,  $k \geq 12$ , then every point of  $G$  has a neighborhood such that the metric in it can be realized by a  $(k-5)$ -regular surface in  $E^3$ .

The second paper strengthens these results under the additional assumption that the curvature is positive. If the metric of a convex surface with positive curvature is  $k$ -regular (analytic),  $k \geq 5$ , then the surface itself is  $(k-2)$ -regular (analytic). If a convex surface is  $k$ -regular (analytic),  $k \geq 5$ , and has positive curvature, then any surface isometric to it is  $(k-3)$ -regular (analytic). If  $F_1, F_2, F_3$  are isometric  $k$ -regular ( $k \geq 5$ ) or analytic surfaces with positive curvature, then any two corresponding points of  $F_1$  and  $F_2$  have neighborhoods  $U_1, U_2$  such that  $U_1$  can be deformed into  $U_2$  by passing only through  $(k-2)$ -regular (analytic) surfaces isometric to  $U_1$ . The proofs of these results are unfortunately only partially stretched, and therefore far from complete. They are based on S. Bernstein's and Schauder's work on the equations of the Monge-Ampere type.

H. Busemann (Los Angeles, Calif.)

Source: Mathematical Reviews,

Vol

11 No. 3

Bogorelou, A.D.

Kornel'cov, A. V. Regularity of convex surfaces. Har'-  
kov Gos. Univ. Uc. Zap. 34—Zap. Mat. Otd. Fiz.-  
Mat. Fak., Har'kov. Mat. Obsc. (4) 22 (1950), 5-49  
(1951). (Russian)

This paper appeared before the author's book "Deformation of convex surfaces" [Gostehizdat, Moscow-Leningrad, 1951; MR 14, 400] which contains the results of the present paper, with the exception of one which is worth mentioning because the problem has interested several mathematicians lately. On a closed convex surface  $S$  in  $E^3$  of class  $C^2$  and with positive curvature let  $\varphi(R_1 + R_2, R_1 R_2, u)$  be a function of class  $C^2$  in the variables  $R_1, R_2$  and the unit vector  $u$ , where  $R_1, R_2$  are the principal radii of curva-

ture at the point of  $S$  with exterior normal  $u$ . If  $\partial\varphi/\partial R_1 = \partial\varphi/\partial R_2 > 0$ , then  $S$  is determined by  $\varphi$  up to a translation. This was proved in the analytic case by A. D. Alexandrov [C. R. (Dokl.) Acad. Sci. USSR (N.S.) 22 (1939), 99-102].

H. Busemann

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Pogorelov, A. V.

Pogorelov, A. V. On regularity of convex surfaces. Uspchi Matem. Nauk (N.S.) 5, no. 3(37), 188-189 (1950).

This paper contains essentially the same results as those in a previous paper [Dokl. Akad. Nauk SSSR (N.S.) 67, 791-794 (1949); these Rev., 11, 201] with the improvement that  $k=2$  and  $k=3$  are replaced by  $k=1$  and  $k=2$  respectively. The proofs, which are only sketched, are based on the following theorem, for which no proof is indicated. Let  $F(x, y, z, p, q, r, s, t)=0$  be a partial differential equation of elliptic type. If  $F$  has all  $k$ th partial derivatives ( $k \geq 3$ ) with respect to all arguments, then a solution  $z(x, y)$  has at least all  $(k+1)$ st partial derivatives.

H. Busseman.

Source: Mathematical Reviews,

Vol. 12, No. 2.

POGORELOV, A. V.

On the unique determination of infinite convex surfaces.

Učenye Zapiski Har'kov. Gos. Univ. 28, Zapiski Naukno-Issled. Inst. Mat.  
Meh. i Har'kov.

Mat. Obšč. (4) 20, 53-60, 1950.

GOV CIO V. H. V.

Aleksandrov, A. D., and Pogorelov, A. V. Uniqueness of convex surfaces of revolution. Mat. Sbornik N.S. 66(68), 183-204 (1950). (Russian)

Let an unbounded convex surface in  $E^3$  mean a set homeomorphic to the plane which is the complete boundary of an unbounded convex set in  $E^3$ . All surfaces considered are of class  $C^1$ . A surface  $S$  is said to be uniquely determined within a certain class  $\Gamma$  if every surface in  $\Gamma$  which is intrinsically isometric to  $S$  is congruent to  $S$ . An unbounded convex surface of revolution whose spherical image has measure less than  $2\pi$  is uniquely determined within the class of all surfaces with the same spherical image. An unbounded convex surface of revolution  $z = f(x^2 + y^2)$  whose spherical image has measure  $2\pi$  is uniquely determined (within the class of all  $C^1$  surfaces) if an  $m > 0$  exists such that  $f'(t) > m$ . The main tool is the following theorem on infinitesimal (isometric) deformations. Let the unbounded convex surface  $z = f(x, y)$  undergo an infinitesimal deformation for which the velocity in the direction of the  $x$ -axis of the point  $(x, y, f(x, y))$  is  $\dot{f}(x, y)$ . When  $(x, y, f(x, y))$  tends on the surface to  $\infty$  let  $\dot{f}(x, y)(x^2 + y^2)^{-1} \rightarrow 0$ . Then the deformation reduces to a motion. H. Bustmann (Los Angeles, Calif.)

Source: Mathematical Reviews.

Vol. II No. Q

POGORLOV, A.V.

PHASE I

## TREASURE ISLAND BIBLIOGRAPHIC REPORT

AID 177 - I

BOOK

Author: POGORLOV, A. V., Stalin Prize Winner

Call No.: AF569436

Full Title: BENDING OF CONVEX SURFACES

Transliterated Title: Izgibaniye vypuklykh poverkhnostey

## Publishing Data

Originating Agency: None

Publishing House: State Publishing House of Technical Theoretical Literature

Date: 1951

No. pp.: 183

No. of copies: 4,000

## Editorial Staff

Editor: Chudov, L. A.

Tech. Ed.: None

Editor-in-Chief: None

Appraiser: None

## Text Data

Coverage: A monograph on the mathematical theory of the geometry of convex surfaces and their bending. The contents of the chapters are: geodetic lines on a convex surface and theorems frequently referred to in the text; a few properties of the curvature of convex surfaces; the non-bending characteristic of convex caps; evaluation of the curvature of normal sections of a surface; regularity of surfaces with a regular metric; existence of convex surfaces with a regular metric; bending of regular convex surfaces of a positive Gauss curvature.

This is a complicated, advanced text. A thorough knowledge of differential geometry and also of the theories of sets and of convex surfaces

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Izgibaniye vypuklykh poverkhnostey

AID 177 - I

(e.g., A. D. Aleksandrov's Inner Geometry of Convex Surfaces) is a prerequisite for digesting this book. The book appears to be of theoretical value.

Purpose: Intended for scientific workers in mathematics and senior students of university departments of mathematics and physics.

Facilities: None

No. of Russian and Slavic References: 12, (1910-1950)

Available: A.I.D., Library of Congress.

2/2

V G O V K L K O V, A. V.

Pogorelov, A. V. The rigidity of general convex surfaces.  
Doklady Akad. Nauk SSSR (N.S.) 79, 739-742 (1951).  
(Russian)

On convex surface the boundary of a convex body in  $E^3$  with interior points. This paper announces the fundamental result: Two intrinsically isometric convex surfaces are congruent as sets in  $E^3$ . While details of the proof are missing the essential steps are outlined, and it seems that the complete proof will not be unwieldy.

Together with the author's result, that a realization of a regular line element is again regular [same Doklady (N.S.) 66, 1051-1053; 67, 791-794 (1950); these Rev. 11, 201] and A. D. Aleksandrov's result on the realizability as a convex surface in  $E^3$  of an abstractly given two-dimensional convex metric, the present result settles a famous set of problems. The second of these problems is inherently connected with differential equations. Outside of Russia the first and the last problems have also been approached via differential

Source: Mathematical Reviews.

equations with geometrically quite unacceptable restrictions. In addition to differentiability hypotheses which exclude such unnatural objects as cubes "with their sharp corners and overflat faces", the curvature is usually assumed to be positive. The present paper shows conclusively that this approach is inadequate. Unfortunately, papers of this type on rigidity and realizability continue to appear.

H. Busemann (Auckland).

Vol. 13 No. 3

SMA  
JPA

POGORELOV, A.V.

POGORELOV, A.V.; ISHLINSKIY, A.Yu., redaktor; TIMOSHOK, N.P., redaktor;  
SIVACHENKO, Ye.K., redaktor.

[Single-valued definition of general convex surfaces] Odnoznachnaia  
opredelennost' obshchikh vypuklykh poverkhnosteii. Kiev, Izd-vo Aka-  
demii nauk Ukrainskoi SSSR. 1952. 68 p. (Monografi. Instituta mate-  
matiki, no.2)

(MLRA 7:2)

1. Chlen-korrespondent Akademii nauk Ukrainskoy SSR (for Pogorelov).
2. Deystvitel'nyy chlen Akademii nauk Ukrainskoy SSR (for Ishlinskiy).  
(Surfaces)

Pogorelov, A. V. On rigidity of convex polyhedra.  
Izv. Zap. 49—Zap. Mat. Otd.  
Fiz. Mat. Fak. i Har'kov. Mat. Obsč. (4) 23 (1952),  
79–89 (1954). (Russian)

This is a new proof for the rigidity of convex polyhedra in the general sense required for A. D. Alexandrov's theory; this means that we allow subdivision of each face by diagonals which do not intersect in the interior of the face and thus admit polyhedra of different combinatorial types for comparison. A polyhedral cap is a convex polyhedron with boundary in a plane  $P$  and intersected at most once by normals to  $P$ . The author shows first that a polyhedral cap is rigid if its boundary is constrained to remain plane. He then proves rigidity of unbounded polyhedra with total curvature  $2\pi$ , and under an additional condition also when the curvature is less than  $2\pi$ . Finally he shows rigidity for closed polyhedra. With different proofs these results are also found in A. D. Alexandrov's convex polyhedra [Gostekhizdat, Moscow-Leningrad, 1950; MR 12, 7(2)].

H. Busemann

POGORELOV, A. V.

USSR/Mathematics - Differential  
Geometry, Curvature  
Geometry, Curvature With a Given Gauss -  
(Gaussian)

JUL/AUG 52

"Regularity of a Convex Surface With a Given Gauss -  
sian Curvature," A. V. Pogorelov, Khar'kov

"Matemat. Sbor" Vol XXXI (73), No 1, pp 88-103

"Matemat. Sbor" Vol XXXI (73), No 1, pp 88-103  
"Regularity of a Convex Surface With a Given Gauss -  
sian Curvature," A. V. Pogorelov, Khar'kov

"Matemat. Sbor" Vol XXXI (73), No 1, pp 88-103  
"Regularity of a Convex Surface With a Given Gauss -  
sian Curvature," A. V. Pogorelov, Khar'kov

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sian Curvature," A. V. Pogorelov, Khar'kov

"Regularity of a Convex Surface With a Given Gauss -  
sian Curvature," A. V. Pogorelov, Khar'kov

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POGORELOV, A. V.

PA 227T52

USSR/Mathematics - Boundary-Value Problem 21 Mar 52

"Boundary-Value Problem for the Equation  
 $r_t - s^2 = f(x,y)$  and Its Geometrical Applications," A.B. Pogorelov

"Dok Ak Nauk SSSR" Vol 83, No 3, pp 361-363

States that the following 3 problems are inter-related: solvability of subject eq; regularity of convex surface whose Gaussian curvature is regular; and existence of a surface with given Gaussian curvature. The author considers them simultaneously by employing both analytical and geometrical methods. Demonstrates a number of relevant theorems. Submitted by Acad.

A.N. Kolmogorov 24 Jan 52.

227T52

POGORELOV, A.V. [author]; YEFIMOV, N.V. [reviewer].

"Unique determinability of general convex surfaces." A.V.Pogorelov. Reviewed by N.V.Yefimov. Sov.kniga no.8:6-8 Ag '53. (MLR 6:8)  
(Surfaces of constant curvature) (Pogorelov, A.V.)

POGORELOV, A.V.

Mathematical Reviews  
Vol. 15 No. 3  
March 1954  
Geometry

6-24-54

✓

Pogorelov, A. V. On existence of a convex surface with a given sum of the principal radii of curvature. *Uspchi Matem. Nauk. (N.S.)* 8, no. 3(55), 127-130 (1953). *Z*

The sum  $F(u)$  of the principal radii of curvature of a convex surface satisfies as function of the unit normal  $u$  the conditions  $F(u) \geq 0$ ,  $\int_{\Omega} u F(u) d\omega = 0$ , where  $\Omega$  is the unit sphere. It is known that not every function  $F(u)$  satisfying these conditions is the sum of the principal radii of curvature of a suitable convex surface. It is shown that it suffices to add the condition that for every  $u$  and every direction  $t$  through  $u$  the relation  $F(u) - F_{tt}(u) \geq 0$ , where  $F_{tt}(u)$  is the second derivative of  $F(u)$  with respect to arclength along the great circle with direction  $t$ . *H. Busemann.*

Pogorelov, A. V.

Mathematical Reviews  
Vol. 15 No. 3  
March 1954  
Geometry

Pogorelov, A. V. On stability under bending of isolated edge points on a convex surface. *Uspehi Matem. Nauk* (N.S.) 8, no. 3(55), 131-134 (1953). (Russian)

A surprising and nontrivial example is constructed by using some of the deeper results of A. D. Alexandrov to show that isolated points of a convex surface at which the number of independent supporting planes equals two may arise and disappear under isometric deformation of the *H. Busemann* (Los Angeles, Calif.).

(2) Math

4/2/54

POGORELOV, A.V. [author]; YEFIMOV, N.V. [reviewer].

"Flexure of convex surfaces." A.V.Pogorelov. Reviewed by N.V.Efimov. Usp.  
mat.nauk 8 no.5:213-214 S-0 '53. (MLRA 6:10)  
(Pogorelov, A.V.) (Surfaces, Deformation of)

POGORELOV, A.V. [author]; YEFIMOV, N.V. [reviewer].

"Unique determinability of general convex surfaces." A.V.Pogorelov. Reviewed by N.V.Efimov. Usp.mat.nauk 8 no.5:214 S-0 '5). (MLRA 6:10)  
(Surfaces of constant curvature)

POGORELOV, A. V.

USSR/Mathematics - Curvature

21 Mar 53

"Exterior Curvature of Smooth Surfaces," A. V.  
Pogorelov

DAN SSSR, Vol 89, No 3, pp 407-409

Gives exterior definition of curvature of smooth  
surface not subjected to further assumptions of  
regularity, and analyzes and extensive class of  
smooth surfaces representing manifolds of  
bounded curvature. Presented by Acad V. I.  
Smirnov 5 Jan 53.

272T60

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341610001-4

POGORELOV, A.V.

Single-valued determinability of infinite convex surfaces.  
Dokl. AN SSSR 94 no.1:21-23 Ja '54.  
(Surfaces of constant curvature) (MLRA 7:1)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341610001-4"

POGORELOV, A. V.

USSR/Physics - Electronics

Conf.

1/1

Authors : Lifshits, I. M. and Pogorelov, A. V.

Title : Determination of the Fermi surface and electron speeds in metal by the oscillations of magnetic susceptibility

Periodical : Dokl. AN SSSR, 96, Ed. 6, 1143 - 1145, June 1954

Abstract : A study of the de Haas-van Alphen effect for particles with arbitrary dispersion law showed that the periods and amplitudes of the magnetic moment oscillation are connected with the form of the Fermi boundary surface for electron in the metal. By knowing the form of that surface one can find the volume and consequently the number and speed of electrons in the corresponding zone. The magnetic susceptibility oscillations in the zone of not too large fields ( $H \sim 10^{-4}$  Gauss) are connected only with zones having an abnormally small number of electrons. One reference.

Institution : Acad. of Sc. Ukr-SSR, Physico-Technical Institute

Presented by : Academician L. D. Landau, March 15, 1954

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341610001-4

POGORELOV, A. V.

POGORELOV, A.V.

[Lectures on differential geometry] Lektsii po differentsiyal'noi  
geometrii. Khar'kov, Izd-vo Khar'kovskogo gos.universiteta im.  
A.M.Gor'kogo, 1955. 146 p. (MIRA 11:1)  
(Geometry, Differential)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001341610001-4"